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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,119

07/12/2005

Robert E. Dutton

35010/144US

8722

32827

7590

11/03/2006

THE OLLILA LAW GROUP LLC
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EXAMINER

FRANK, RODNEY T

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/542,119	DUTTON ET AL.	
	Examiner	Art Unit	
	Rodney T. Frank	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-8, 11-13, 16-18, and 21 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 9, 10, 14, 15, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>07/12/05</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5-8, 11-13, 15-18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rondeau et al. (U.S. Patent Number 6,491,421; hereinafter referred to as Rondeau). Rondeau discloses a method for continuously mixing a borehole fluid such as cement includes using a measurement of the solid fraction of a cement slurry as it is being mixed to determine the ratio of the solid and liquid components to be added to the slurry. A system for mixing the includes a liquid material (water) supply including a flow meter; a solid material (cement) supply; a mixer which receives the liquid and solid materials and includes an output for delivering materials from the mixer to a delivery system; a device for measuring the amount of material in the mixer; and a flow meter in the output; wherein measurements from the flow meters and the device for measuring the amount of material in the mixer are used to control the amount of solid and/or liquid material added to the mixer (Please see the abstract).

3. With respect to claim 1, Rondeau discloses and illustrates in figure 2 a measurement system comprising a Coriolis flow meter (104, 128, or 128', as disclosed in column 2 lines 22 through 24), that makes measurements of a base fluid (water) and a fracture fluid, a base fluid and a proppant and a controller to control to utilize these

various measurements. This is disclosed in column 5, lines 17 through 44. This section does, however indicate that it is directed towards not using densitometers for its measurements. However, Rondeau discloses in column 1 lines 30 through 64 how the same Coriolis meter can be used as a typical densitometer, and how the use of such meters is typical in the art, and therefore such a use is deemed as disclosed in view of the Rondeau reference.

With respect to claim 2, while the type of Coriolis meter is not disclosed, since no specific type is mentioned, then all types of Coriolis meters are deemed to be useful in practicing the invention, including the straight tube one of the current claim.

With respect to claim 5, the use of a control system to make measurements for the system is disclosed in column 4, lines 44 through 55. While the specific measurements are not disclosed to be density measurements, utilizing a type of measurement with a control system would be obvious to one of ordinary skill in the art at the time of the invention. Since the reference already disclosed the use of density measurements as obvious, then the use of the controller to control said measurements to obtain proper results would be obvious as well.

With respect to claims 6-8, column 4, lines 44 through 55 describes the various functions and parameters relating to the controller and its interfaces.

With respect to claim 11, the reference discloses that the Coriolis flow meters are configured to measure flow rate rather than density, so one would be able to ascertain from the reference how the flow meter would measure flow rate.

With respect to claims 12, 13, 16-18, and 21, these claims are method claims that are directly related to the apparatus claims 1, 2, 5-8, and 11 discussed above. Since said apparatus claims are discussed in length above, then the method of using the apparatus in order to practice the operation of the invention would be deemed as obvious in view of the reference as well. The rejections for method claims 12, 13, 16-18, and 21 correspond to the rejections for apparatus claims 1, 2, 5-8, and 11, respectively, and will not be repeated here.

Allowable Subject Matter

4. Claims 3, 4, 9, 10, 14, 15, 19, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney T. Frank whose telephone number is (571) 272-2193. The examiner can normally be reached on M-F 9-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2856

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RTF
October 26, 2006



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